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#### IN THE

#### UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Roland M. HOCHMUTH et al. Confirmation No.: 5760

Application No.: 10/004,191 Examiner: Nguyen, Hau H.

Filing Date: October 31, 2001 Group Art Unit: 2628

Title: SYSTEM AND METHOD FOR DISPLAYING AN IMAGE ON A NETWORK ATTACHABLE DISPLAY

E. DEVICE

Mail Stop Appeal Brief - Patents Commissioner For Patents PO Box 1450 Alexandria, VA 22313-1450

# TRANSMITTAL OF REPLY BRIEF

Transmitted herewith is the Reply Brief with respect to the Examiner's Answer mailed on \_\_\_\_\_ May 1, 2008

This Reply Brief is being filed pursuant to 37 CFR 1.193(b) within two months of the date of the Examiner's Answer.

(Note: Extensions of time are not allowed under 37 CFR 1.136(a))

(Note: Failure to file a Reply Brief will result in dismissal of the Appeal as to the claims made subject to an expressly stated new ground rejection.)

No fee is required for filing of this Reply Brief.

If any fees are required please charge Deposit Account 08-2025.

Respectfully submitted,

Roland M. HOCHMUTH et al.

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#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

# APPEAL FROM THE EXAMINER TO THE BOARD OF PATENT APPEALS AND INTERFERENCES

**Appellants**: Roland M. HOCHMUTH et al. **Confirmation No.**: 5760

Serial No.: 10/004,191 Examiner: Nguyen, Hau H.

Filing Date: October 31, 2001 Group Art Unit: 2628

**Title**: System And Method For Displaying An Image On A Network Attachable Display Device

**MAIL STOP: APPEAL BRIEF-PATENTS** 

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Dear Sir:

# **REPLY BRIEF**

Appellants respectfully submit this Reply Brief in response to the Examiner's Answer mailed May 1, 2008, pursuant to 37 CFR § 41.41.

# **STATUS OF CLAIMS**

Claims 37-61 stand rejected pursuant to a Final Office Action mailed November 14, 2007. Claims 1-36 have been cancelled without prejudice or disclaimer. Claims 37-61 are presented for appeal.

# **GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

- 1. Claims 37-39, 43, 45, 50-52, 55, 58, and 61 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,466,203 issued to Van Ee (hereinafter " *Van Ee*") in view of U.S. Patent No. 6,044,445 issued to Tsuda et al. (hereinafter "*Tsuda*").
- 2. Claims 40-42, 46-49, 53-54, 56-57, and 59-60 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Van Ee* in view of *Tsuda* and further in view of U.S. Patent No. 6,704,024 issued to Robotham et al. ("*Robotham*").

#### **ARGUMENT**

#### 1. Claims 37-39, 43, 45, and 50-52

Of the rejected claims, in this grouping of claims, Claims 37, 45, and 52 are independent. Appellants respectfully submit that each of independent Claims 37, 45, and 52 are patentable over the cited references. Claim 37, for example, recites:

# 37. A system for displaying an image, comprising:

- a display device communicatively couplable to a network and adapted to display the image, the display device comprising:
- a display network interface operable to receive bitmap image data of the image from the network;
- a display frame buffer operable to store the received bitmap image data; and
- a display refresh unit operable to read the bitmap image data from the display frame buffer and display and refresh the image at a refresh rate.

Appellants respectfully submit that neither *Van Ee* nor *Tsuda*, alone or in combination, discloses, teaches or suggests all the limitations of independent Claim 37. For example, neither *Van Ee* nor *Tsuda*, alone or in combination, discloses or suggests receiving bitmap image data of the image from the network.

Van Ee appears to disclose a hand-held apparatus 100 having a display 102 for displaying graphical information, a frame buffer 112 coupled to the display 102 for storing information content to be shown on the display 102, and a modem 114 for connecting to the Internet (Van Ee, column 3, lines 44-66, figure 1). Van Ee further recites:

Such handheld devices provided with the auto-zoom feature let the user retrieve graphical information, e.g., a web page or streamed video that is stored, e.g., as a bitmap, in the display's framebuffer or another cache.

(Van Ee, column 2, lines 31-35).

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Van Ee does not appear to disclose or even suggest that the <u>data received</u> by the handheld device from the network is "<u>bitmap image data</u>" as recited by Claim 37. Van Ee appears to disclose that the handheld device lets the user retrieve graphical information, such as a web page or streamed video that is <u>stored as</u> a bitmap on the device. Thus, Van Ee appears to disclose that the handheld device <u>receives</u> a web page or streamed video content, processes the received data to <u>convert the data into a bitmap</u> prior to storing the bitmap in the display's frame buffer. Accordingly, Van Ee does not appear to disclose or suggest the feature of, "receive[ing] <u>bitmap image data</u> of the image <u>from the network</u>," as recited in Claim 37.

Tsuda appears to be relied on to purportedly disclose reading data out of a frame buffer at an appropriate refresh rate for display on a display device (Office action, page 3 (Tsuda, column 1, lines 54-65)). Further, Tsuda discloses, "data structures for managing a network interface and a display device are different, so that it is necessary to convert the image data from a data structure required for managing the network interface to a data structure required for managing the display device, during transfer of the image data," (Tsuda, col. 1, line 24-29) (emphasis added). Thus, Tsuda also does not appear to disclose or even suggest the feature of, "receive[ing] bitmap image data of the image from the network," as recited in Claim 37. Accordingly, neither Van Ee nor Tsuda, alone or in combination, discloses or suggests all the limitations of independent Claim 37.

Further, the Examiner fails to state a *prima facie* case of obviousness because no motivation exists to combine the teachings of the references. In fact, the Examiner states, "the display device as taught by *Van Ee* is <u>capable of</u> refreshing the image in order to display video frame by frame," (Office Action, page 3) (emphasis added). In combining the teachings of the references, the Examiner further states, "This is <u>also</u> taught by *Tsuda*." (Office Action, page 3) (emphasis added). However, the Examiner's own statement appears to indicate that there is no apparent disadvantage/need present in *Van Ee* that would generally motivate one of ordinary skill in the art to combine the teachings of another reference with the teachings of *Van Ee* because *Van Ee* is already capable of doing something that the Examiner considers to be taught by *Tsuda*. Thus, no need or reason exists for combining the teachings of *Tsuda* with that of *Van Ee*. Accordingly, the Examiner fails to state a *prima facie* case of obviousness in regards to Claim 37.

In responding to previous arguments presented by Appellants, the Examiner states "In fact, the cited portion in the rejection above and throughout the disclosure of the Patent *Van Ee*, the handheld device receives data in the form of bitmap image." (Office Action, page 3). Appellants respectfully disagree.

The cited portion of Van Ee specifically states, "Such handheld devices provided with the auto-zoom feature let the user retrieve graphical information, e.g., a web page or streamed video that is stored, e.g., as a bitmap, in the display's framebuffer or another cache," (emphasis added). Thus, the cited portion states that the user retrieves graphical information, from the frame buffer, that may be stored as a bitmap in the frame buffer. Van Ee does not specifically disclose or even suggest that it receives data in the form of bitmap image data from the network as alleged by the Examiner. Van Ee has only disclosed in the portion cited by the Examiner that the data is stored as a bitmap. Further, other sections of Van Ee disclose only the storage of bitmaps. (See, Van Ee, col. 3, line 60, "Memory 106 stores bitmaps that are mapped onto display"). In fact, Van Ee appears to teach away from any suggestion that it receives data in the form of bitmap image from the network because the Van Ee apparatus appears to process the data received from an external source, e.g., the Internet, prior to rendering on the display an image corresponding to the data received. (See, Van Ee, col. 2, lines 36-42). further states that "[t]he animation is effected through proper processing of the bitmaps in memory 106 and frame buffer 112." (Van Ee, col. 4, lines 32-34) (emphasis added). Accordingly, the Examiner's assertion that Van Ee discloses that the handheld device receives data in the form of bitmap image from the network is not supported or taught by Van Ee.

Further, the Examiner states "It is also disclosed in the excerpt above that the handheld device has a very limited capability of processing power." Appellants respectfully disagree. Neither the portion of *Van Ee* cited by the Examiner nor any other portion of *Van Ee* appears to disclose or even suggest that the handheld device has a very limited capability of processing power. In fact, the exact opposite appears to be true. *Van Ee* states "PDA's will get more power and smaller size and accommodate more, and more versatile, functionalities." (*Van Ee*, col. 1, lines 52-54). Thus, the Examiner's assertion that *Van Ee* discloses receiving data in bitmap form because the handheld device has a very limited capability of processing power is clearly incorrect.

In response to the Examiner's statement that Figure 3 shows the graphic data is compressed before sending, Appellants cite to portions of the disclosure that state, "The graphics image data may be obtained by network interface 28 either from compression unit 26 or from frame buffer 50." (Specification, par. 0028) (emphasis added); "Network interface 28 may read graphics image data from frame buffer 50." (Specification, par. 0039) (emphasis added); and "The graphics image data may be stored in display frame buffer 170 in either compressed or decompressed form." (Specification, par. 0039) (emphasis added). Furthermore, Figure 3 illustrates that block 102, "Compress Graphics Data", may be bypassed. Accordingly, the disclosure clearly supports the features of Claim 37 in which the display network interface is operable to receive bitmap image data.

Moreover, the fact that graphics image data may be received in compressed or decompressed form does not change the fact that the system of Claim 37 receives graphics image data of the image from the network. In other words, graphics image data, as supported by the specification, is processed data associated with an image that is stored in a frame buffer. (See, Specification, p. 1, lines 18-20, "A graphics chip on the graphics adapter renders the image based at least in part on the received command. Graphics image data associated with the rendered image is stored in a frame buffer.") For example, Figures 3 and 4 clearly depict that the data being received is graphics image data read from the frame buffer of the transmitting device. Therefore, whether or not the graphics image data is compressed prior to transmitting does not alter the fact that the receiving device is receiving graphics image data and thus, Claims 40-42 do not conflict with Appellants previous arguments in regards to Claim 37 as alleged by the Examiner.

At least for the reasons discussed above in connection with independent Claim 37, Appellants respectfully submit that Claims 45 and 52 are also patentable over the cited references.

Claims 38, 39, 43, and 50-51 depend respectively from independent Claims 37 and 45. Therefore, for at least for the reasons discussed above, Claims 38, 39, 43, and 50-51 are also patentable. Accordingly, Appellants respectfully request the allowance of Claims 37-39, 43, 45, and 50-52.

# 2. Claims 55 and 61

Independent Claim 55 recites "a display device communicatively couplable to a network" having "a single-chip display controller" where the "single-chip display controller" comprises "a network interface operable to receive the graphics image data of the image from the network and provide the graphics image data to the frame buffer" and "a display refresh unit operable to read the graphics image data from the frame buffer and display and refresh the image at a refresh rate." In the Office Action, the Examiner appears to acknowledge that neither *Van Ee* nor *Tsuda* discloses the above-referenced limitations of Claim 55 (Office Action, page 4). However, the Examiner asserts that it would be obvious to apparently provide these limitations in the *Van Ee* device (Office Action, page 4). Appellants respectfully disagree.

In the Office Action, as a basis for the Examiner's obvious assertion, the Examiner states that "the size of the circuit board can be reduced and the circuit paths can also be shortened, thereby reducing the cost while enhancing performance" (Office Action, page 4). Appellants respectfully submit that the Examiner's statements are nothing more than unsupported speculations and, therefore, amount to no more than hindsight reasoning, which is improper. For example, the Examiner offers no support or basis, in fact or otherwise, that the size of a circuit board would be decreased by incorporating the limitations recited by Claim 55 in a single-chip display controller. To the contrary, such a single-chip display controller may require greater space on a printed circuit board and require a larger circuit board. Moreover, the single-chip controller of Claim 55 may cost more than alternatives. Accordingly, Appellants respectfully submit that Claim 55, and Claims 56 and 57 that depend therefrom, are patentable over the cited references and request the allowance of Claims 55-57.

# 3. <u>Claim 58</u>

Independent Claim 58 recites "a display device communicatively couplable to a network and adapted to display the image" where the display device comprises "a display network interface operable to receive graphics image data of the image over the network from a frame buffer of a remote source device" (emphasis added). Appellants respectfully submit that no *prima facie* rejection of Claim 58 has been established. For example, in the Office Action, the Examiner merely refers to the

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basis for rejecting Claim 37 as a basis for rejecting Claim 58 (Office Action, page 4). However, Claim 37 does not recite "a display network interface operable to receive graphics image data of the image over the network <u>from a frame buffer of a remote source device</u>" as recited by Claim 58 (emphasis added). Accordingly, for at least this reason, the rejection is improper.

Notwithstanding the above, Appellants respectfully submit that neither *Van Ee* nor *Tsuda* discloses, teaches or suggests the limitations recited by Claim 58. For example, *Van Ee* appears to disclose a hand-held apparatus 100 having a display 102 for displaying graphical information, a frame buffer 112 coupled to the display 102 for storing information content to be shown on the display 102, and a modem 114 for connecting to the Internet (*Van Ee*, column 3, lines 44-66, figure 1). *Van Ee* appears to disclose that graphical information (e.g., a web page or streamed video) is stored in the display's framebuffer or other cache (*Van Ee*, column 2, lines 31-35). However, *Van Ee* does not appear to disclose or even suggest that graphics data is received by the *Van Ee* device from "a frame buffer of a remote source device" as recited by Claim 58 (emphasis added). Further, the Examiner does not rely on *Tsuda* to remedy, nor does *Tsuda* appear to remedy, at least this deficiency of *Van Ee*. Therefore, for at least these reasons, Appellants respectfully submit that Claim 58, and Claims 59-61 that depend therefrom, are patentable over the cited references and request the allowance of Claims 58-61.

# B. Claims 40-42, 46-49, 53-54, 56-57, and 59-60

Claims 40-42, 46-49, 53-54, 56-57, and 59-60 were rejected under 35 U.S.C. §103(a) as being unpatentable in view of *Ee* in view of *Tsuda* and further in view of U.S. Patent No. 6,704,024 issued to Robotham et al. ("*Robotham*"). Because Claims 40-42, 46-49, and 53-54 depend from independent Claims 37, 45, 52, 55, and 58, respectively, and because *Robotham* does not appear to remedy at least the deficiencies of *Van Ee* and *Tsuda* as discussed above, Claims 40-42, 46-49, 53-54, 56-57, and 59-60 are also patentable. Accordingly, Appellants respectfully request the allowance of Claims 40-42, 46-49, 53-54, 56-57, and 59-60.

# **CONCLUSION**

Appellants have demonstrated that the present invention as claimed is clearly distinguishable over the art cited of record. Therefore, Appellants respectfully request the Board of Patent Appeals and Interferences to reverse the final rejection of the Examiner and instruct the Examiner to issue a notice of allowance of all claims.

No fee is believed due with this Reply Brief. If, however, Appellants have overlooked the need for any fee, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 08-2025 of Hewlett-Packard Company.

Respectfully submitted,

By: /James L. Baudino/ James L. Baudino Reg. No. 43,486

Date: June 12, 2008

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